

Thursday, January 15, 2015 9:02:58 AM

647.1403
B128326
REV. A

128326

Page 1

Item ID: 647.1403

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Cutter Assembly, U-Channel

Start Date: 1/15/2015 **Start Qty:** 4.00

4

Cust Item ID:

Required Date: 1/15/2015 **Req'd Qty:** 4.00

4

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: MC5 Date: 15-01-15 Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.1400	A

110	Pick Kit	0.00
-----	----------	------

110

Packaging	Memo	0.00
-----------	------	------

Packaging 12-1-13

120	0.00
-----	------

120

Small Fab	Memo	0.00
-----------	------	------

Small Fab Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2.

A/R RTV LOCTITE 598: 125637
exp. date: 5/15

130	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

130

QC	Memo	0.00
----	------	------

Quality Control

DAS
38
9-89

JAN 16 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 128326

128326

Page 2

Thursday, January 15, 2015 9:02:58 AM

Item ID: 647.1403

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Cutter Assembly, U-Channel

Start Date: 1/15/2015 Start Qty: 4.00

4

Cust Item ID:

Required Date: 1/15/2015 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Identify as per dwg & Stock Location **CK47**

0.00

140

Packaging

Memo

0.00

Packaging

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND
REV***

4

DAS

06
9-89

JAN 16 2015

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

15/1/19 *[Signature]*

[Signature] 15-1-19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Design									
Doc/Data									
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Handling/Pre									
Material									
Operator									
Offset/Setup									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 1

128326

647 1403

Required Date: 1/15/2015

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
601.1541	MS21042L08	Purchased	No			110	Each	0.0000	3	12		DAS	
601 1541					130325				**	12		41 9-89	15-1-15
Locknut(MS21042L08) (8-32 Thd) (Cad Plated) (100 Q													
601.2764	NAS1149FN832 P	Purchased	No			110	Each	0.0000	6	24			
601 2764					130388				**	24		DAS 41 9-89	15-1-15
WASHER(NAS1149FN832P)													
646.9702		Manufactured	No			110	Each	9.0000	1	4		DAS	
646 9702									**			41 9-89	15-1-15
Cutter Sub Assembly (U Channel)													

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
cck012	9	
123326	1	
124140	5	
124693	3	

647.1510	Manufactured	No	110	Each	4.0000	1	4	DAS
647 1510								41
Upper Deflector						**		9-89 15-1-15

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MF	4	
25092	4	

DQA: _____ Date: _____



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Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Thursday, January 15, 2015 9:03:03 AM

Page 2

Work Order ID: 128326

128326

Parent Item: 647.1403

647 1403

Parent Item Name: Upper Cutter Assembly, U-Channel

Start Date: 1/15/2015

Required Date: 1/15/2015

Start Qty: 4.00

Required Qty: 4.00

MS27039-08-19

Purchased

No

110

Each

647.0000

3

12

DAS

MS27039-08-19

41
9-89

15-1-15

Screw

Location

Loc Qty

Loc Code

ST273A

47

m130505

47

12

ST281

600

m131264

600

DQA: _____ Date: _____



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APICAL

INDUSTRIES, INC

ENGINEERING CHANGE NOTICE NO. 03911

SHEET 1 OF 1

DWG NO. 647.1400

REV: N/C

PREPARED BY: J. BECKER

DATE: 06/07/13

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: CUTTER ASSY

APPROVED BY: ENGR

MFG

QC

EFF:

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED CONFIGURATION 647.1403 AND INCORPORATED
ECN 02962

REPLY COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
OF PREVIOUS AMENDMENT
ENGINEERING NOTICE
VENDOR ORDER
128326 MLJ
150115

8	A	646.9702	1			CUTTER SUB ASSY (U CHANNEL)		
6	R	647.1510	1		1	UPPER DEFLECTOR		
5	R	601.2045	A/R	A/R	A/R	RTV, LOCTITE 598		
4	R	601.1541	3	3	3	NUT	MS21042L08	
3	R	601.2765	3	3	3	SCREW	MS27039-0819	
2	R	601.2764	6	6	6	WASHER	NAS1149FN832P	
	C	647.1403				CUTTER ASSY (UPPER U CHANNEL)		
F/N	TC	PART NUMBER	.1403	.1402	.1401	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY					
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

2. APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 1, 6, & 7 UPON ASSEMBLY

1			8	646.9702	CUTTER SUB ASSY (U CHANNEL)		
	1		7	647.1501	LOWER DEFLECTOR ASSY		
1		1	6	647.1510	UPPER DEFLECTOR		
A/R	A/R	A/R	5	601.2045	RTV, LOCTITE 598		
3	3	3	4	601.1541	NUT	MS21042L08	
3	3	3	3	601.2765	SCREW	MS27039-0819	
6	6	6	2	601.2764	WASHER	NAS1149FN832P	
	1	1	1	646.9701	CUTTER SUB ASSY		
				647.1403	CUTTER ASSY (UPPER U CHANNEL)		
				647.1402	CUTTER ASSY (LOWER)		
				647.1401	CUTTER ASSY (UPPER)		
.1403	.1402	.1401	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

QTY	ORIGINAL DATE (MO-DA-YR) 06-15-07 DRAWN BY: P. FRECHER BY: GARDNER DRAWING APPROVAL P. BRAVO 06-15-07	PARTS LIST		
NEXT ASSY (\$)		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
647.1300		CUTTER ASSY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DIMINALS: .005 2. PLACE DIMINALS: .005 3. ANGLES: .5°		SIZE CAGE CODE B 07XME	DWG NO. 647.1400	REV. 1 OF 1
		SCALE NONE	SHEET 1	A